Amendments to the Claims

1. (Currently Amended) A semiconductor device comprising:

a MOS field-effect transistor; and

a diode which is built in said transistor and connected between a source electrode and a drain electrode thereof so that when a voltage in the reverse direction is applied between said source electrode and said drain electrode at the time of operation , which forms a current path between said source electrode and drain electrode,

wherein a contact portion of said diode with said source electrode has such a construction that a high-impurity concentration region having a second conductivity type which is a conductivity type of said source electrode side semiconductor layer of said diode, and a region having a first conductivity type opposite to said <u>second</u> conductivity type or a low-impurity concentration region having said second conductivity type are formed alternately in a plan structure.

2. (Original) The semiconductor device of claim 1, wherein said MOS field-effect transistor is a double-diffusion type MOS field-effect transistor that has a first conductivity type semiconductor layer which provides a drain region, second conductivity type regions which are formed by diffusion in said first conductivity type semiconductor layer, and source regions having a first conductivity type formed by diffusion at an outer periphery of each of said second conductivity type regions in such a configuration that such portions of said second conductivity type regions which are positioned between each of said source regions and said drain region act as channel regions.

3. (Original) The semiconductor device of claim 2, wherein said source electrode is provided so as to be in contact with each of said source regions and a surface portion of each of said second conductivity type regions opposite to each of said channel regions with respect to each of said source regions.

4. (Original) The semiconductor device of claim 3, wherein said second conductivity type regions are formed in a matrix in said first conductivity type semiconductor layer, each of said source regions is formed in a ring shape on a plan view in each of said second conductivity type regions so as to give a constant gap at the periphery of each of said second conductivity type regions, and also said source electrode is formed at a predetermined region of an inner circumference of each of said ring-shaped source regions and the entire inner surface of each of said second conductivity type regions.

5. (Original) The semiconductor device of claim 4, wherein a contact portion of each of said second conductivity type regions with said source electrode has such a construction that one or more first conductivity type high impurity-concentration regions, each of which is ring shape on a plan view and one or more second conductivity type high impurity-concentration regions are provided alternately.

6. (Original) The semiconductor device of claim 4, wherein each of said second conductivity type regions has a low impurity concentration; and wherein a contact portion of each of said second conductivity type regions with said source electrode has such a construction that second conductivity type high impurity-

concentration regions are evenly spaced in each of said second conductivity type regions.